

Falls prevention exercise in Glasgow

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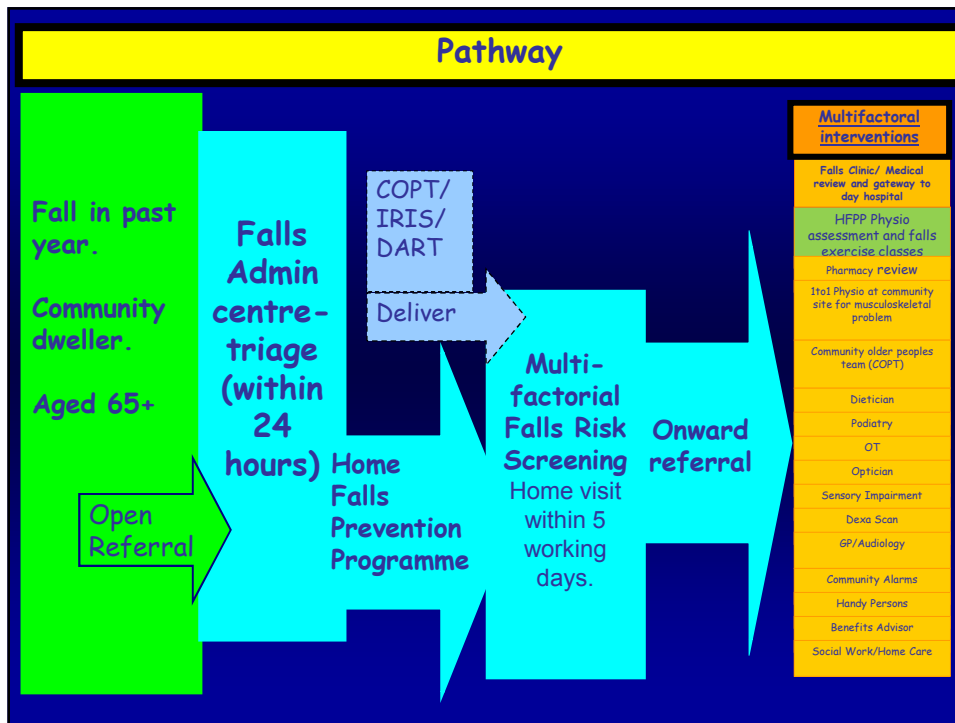
Community Falls Prevention Programme

In association with Fiona Neil and Dr Dawn Skelton, HealthQWest, GCU



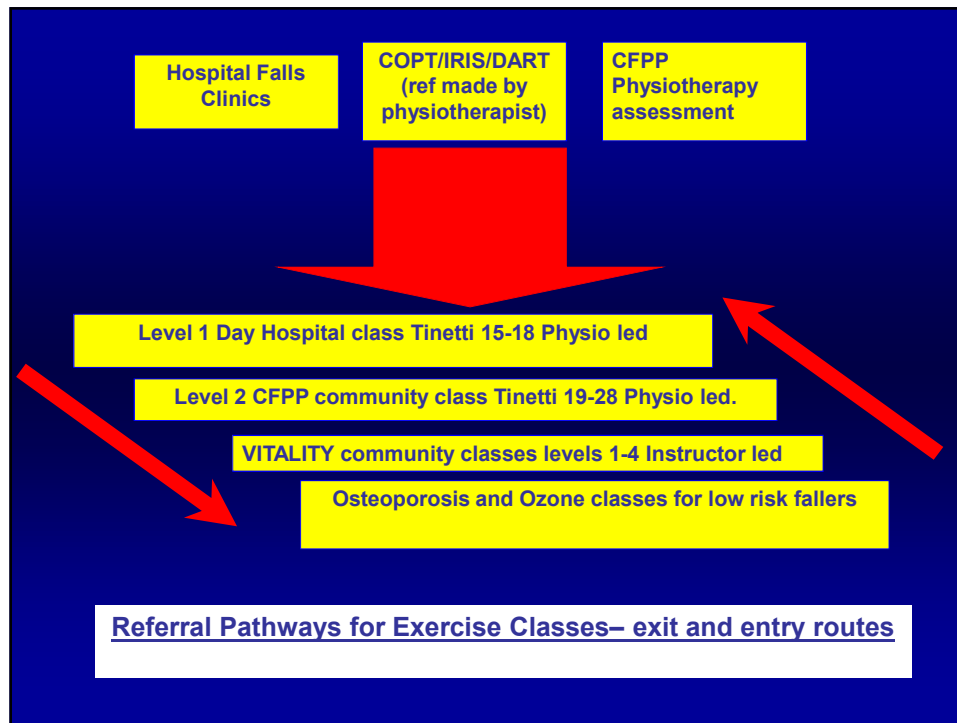
CFPP

- Specialist falls service which aims to prevent further falls by providing a comprehensive falls screening, health education, exercise, rehabilitation and onward referral
- The service is available to individuals who are over 65, live at home and have had a fall in the last year
- 221 referrals a month in 2008
- Telephone triage completed within 24 hours of receiving referral
- Home screening completed within 5 working days of triage



Physiotherapy Intervention

- 12 Strength & Balance Classes
- Classes locally delivered
- Free transport service (70% utilise)
- 12-18 week attendance
- Home Exercises
- Partnership working with Day hospital and Leisure services (Glasgow Culture & Sport)



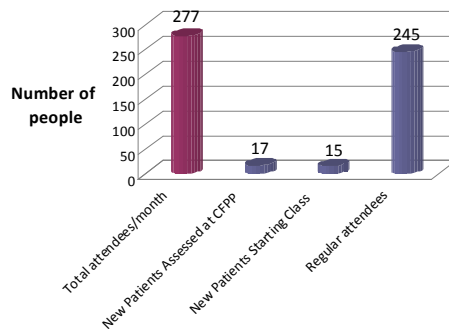
Strength & Balance Programmes

- Evidence based *exercises*
 - (Skelton 2005; Robertson 2001; Campbell 1999)
- Evidence based “*deliverers*”
 - Physiotherapists and trained Postural Stability Instructors (Skelton 2004)
- Evidence based *duration*
 - Dose of 50 hours of balance challenging exercise (Sherrington 2008)



Attendance at classes

CFPP Exercise Class Attendance- average per month citywide 2007



Evaluation of effect

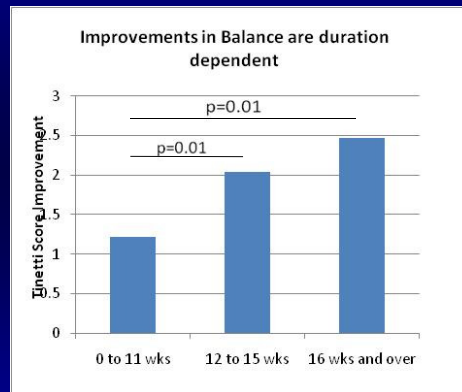
- N= 274 clients considered over a time period in 2007.
- Attended on average 11.9 (sd 3.8) weeks
- Outcome measures:
 - Duration of attendance
 - Functional tests
 - Tinetti Mobility and Balance Score
 - Timed Up and Go
 - 180 degree turn
 - Functional Reach
 - Confidence in Maintaining Balance
 - Tinetti's Falls Efficacy Scale (FES)
 - Patient Satisfaction Questionnaires (N=91)
- Same assessor throughout - not all tests completed on all clients

Outcome measures

Test Mean (sd)	Number of clients	Before exercise sessions	After exercise sessions	P-value
Tinetti Balance Score	274	23.1 (3.3)	24.8 (3.1)	0.000
180 deg turn (deg)	253	5.5 (1.9)	5.0 (1.6)	0.000
Functional Reach (cm)	112	19.2 (5.9)	20.9 (6.9)	0.000
TUAG (sec)	137	18.6 (6.7)	16.3 (5.9)	0.000
ConFBal	162	19.4 (3.9)	16.9 (3.4)	0.000
Tinetti FES	43	29.3 (16.5)	21.5 (11.6)	0.0002

Balance improvements are duration dependent

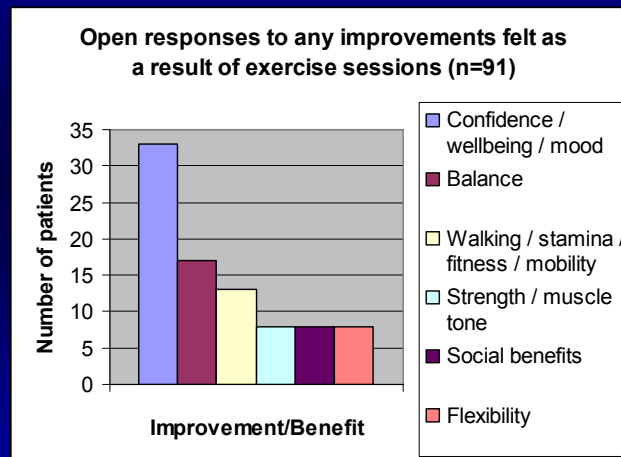
- The Tinetti Mobility and Balance Score showed considerable improvement, but the change was dependent on duration of exercise attendance.
- Those attendees that drop out of sessions before 12 weeks are unlikely to see clinically significant changes in their balance.
- This is in line with the recent systematic review of exercise (Sherrington et al. 2008) where a dose of at least 50 hours confers little benefit to fall risk reduction.



Client Satisfaction

- Satisfaction forms at week 10 of their exercise programme (n=117 issued).
- 91 patients returned the forms (response rate 78%).
- 85% had received information about the class before the sessions started and most (83%) found the pre-class information useful.
- Only 1% thought the class was not in a suitable location; the staffs were not helpful; the exercises were rushed, too short or not well explained (showing a high degree of satisfaction with facilities and delivery).
- 98% felt the exercise classes were beneficial and 94% thought the sessions were good or very good.
- Open response questions showed good improvements to wellbeing (see next slide) however, many people just wrote "enjoyed" in this section!

Open responses to feedback



Summary

- The CFPP exercise service to prevent falls in Glasgow does improve many of the known risk factors for falls
- The benefits are duration dependent
 - clients should be encouraged to adhere for at least 12 weeks, ideally to the maximum 18 weeks and then to move into normal community exercise sessions for older people to maintain the improvements
- High degree of client satisfaction (though questionnaire could have been designed better)